City of San Antonio Contract Summary Sheet

Date 01-04-07 **RFCA Item:**

787

Airborne Thermal and Visible Light Imaging System				
Description of Item(s) and	d Use:			
This contract will provide the City of San Antonio Police Department Helicopter Detail Division with one airborne				
thermal and visible light imaging camera system. Included in the cost of this system is a 2 year parts and labor warranty.				
Estimated Total	\$207,808.00			
Bid Number and Title	07-003 DG Airborne Thermal and Visible Light Imaging Camera System			
Contract Period	Delivery 90 days ARO			
Method of Procurement	Competitively Bid			
Price Trend	9.52% Price Decrease			
Contract Info:	_X_FormalAnnualSupport/MaintenanceLease			
Contractor(s):	L-3 Communications Sonoma EO, 428 Aviation Boulevard, Santa Rosa, CA 95403			
Previous Contractor(s):	Same			
Anticipated Future Requirements and Actions:				
Comments:				
Using Department:	Police Department			

City of San Antonio Bid Tabulation

Opened:	November 6, 2006		
For:	Airborne Thermal and Visible Light Imaging Camera System		L3 Communications Sonoma EO
07-003 DG DC		DG	428 Aviation Boulevard
ltem	Description	QTY	Santa Rosa, CA 95403
1	Airborne Thermal and Visible Light Imaging Camera System	1	
	Price Per Each Price Total		\$207,800.00 \$207,800.00
	Make		L-3 Communications
	Model		Sonoma E-O 12DS200
	Payment Terms		Net 30
	Delivery		90 Days
	Estimated Total Award		\$207,800.00

CITY OF SAN ANTO	NIO ADMINISTRATIVE	SERVICES DEP	ARTMENT
Issued By: DG BID NO.: 07-003 DG			Date Issued: October 18, 2006 Page 1 of 16
	ORMAL INVITATION F AND VISIBLE LIGHT		ERA SYSTEM
Sealed bids in triplicate, subject to the I will be received at the City Clerk, City Hal			
The City of San Antonio Administrative provisions or explanation of how bid form Office in the City Hall Annex, 131 W. Nuc	ns are to be completed. Assi	stance may be recei	
It is the policy of the City of San Anton construction, procurement, professional se established the following minority busin business enterprise (AABE), and small business	ervices, and leases and conce tess enterprise (MBE), wom-	ssions contracting. an business enterpri	The City of San Antonio has
	MBE Goal: <u>15%</u> WBE Go AABE Goal: <u>3%</u> SBE Goa		
Invitation for Bids Terms and Conditions of Inv. The undersigned, by his/her signature, rep Specifications and General Requirements Bidder has read the entire document and a	resents that he/she is authoriz for the amount(s) shown on ti	Specifications and Price Schedule ed to bind the Bidde	
Signer's Name: Robert C. Chandle	Firm Name:	L3 Communciation	ons Sonoma EO
(Please Print or Type)) Address: <u>42</u>	8 Aviation Boulev	ard
Signature of Person Authorized to Sign B	id City, State, Zi	p Code: Santa Ros	sa, CA 95403
Email Address: Bob.Chandler@L-3cc	om.com Telephone No	.: 707.586.3000	
Please complete the following:	Fax No.:	07.284!2686	
Prompt Payment Discount:	apply to your company: African-AmericanOther nedSmall Business (less to appropriete	er Minority (specify) han \$1 million annu) al receipts or 100 employees)
FOR CITY USE ONLY	AWARD		

TERMS AND CONDITIONS OF INVITATION FOR BIDS

READ CAREFULLY

1. GENERAL CONDITIONS

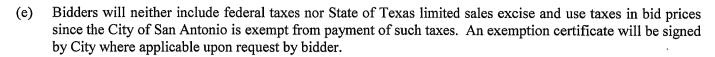
Bidders are required to submit their bids upon the following expressed conditions:

- (a) Bidders shall thoroughly examine the drawings, specifications, schedule(s), instructions and all other contract documents.
- (b) Bidders shall make all investigations necessary to thoroughly inform themselves regarding plant and facilities for delivery of material and equipment as required by the bid conditions. No plea of ignorance by the bidder of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the bidder to make the necessary examinations and investigations, or failure to fulfill in every detail the requirements of the contract documents, will be accepted as a basis for varying the requirements of the City or the compensation to the vendor.
- (c) Bidders are advised that all City contracts are subject to all legal requirements provided for in the City Charter and/or applicable City Ordinances, state and federal statutes. Any bid, after being opened, becomes subject to the Open Information Act, Government Code Chapter 552, therefore bidders must clearly indicate any portion of the submitted bid that the bidder claims is not subject to public inspection under the Open Information Act.
- (d) No officer or employee of the City shall have a financial interest, direct or indirect, in any contract with the City, or shall benefit financially, directly or indirectly, in the sale to the City of any materials, supplies or services, except on behalf of the City as an officer or employee. This prohibition extends to the City Public Service Board, San Antonio Water System, and all City boards and commissions other than those which are purely advisory. In this instance a City employee is defined as any employee of the City who is required to file a financial involvement report pursuant to the City's ethics ordinance.

2. PREPARATION OF BIDS

Bids will be prepared in accordance with the following:

- (a) All information required by the bid form shall be furnished or the bid may be deemed non responsive. The bidder shall print or type name and manually sign the Invitation for Bids.
- (b) Where there is a discrepancy between the unit price and the extended price, the unit price shall prevail.
- (c) Any bid that is considered for award on an "all or none" basis must include a price quote for all units or line items. Any bid that is considered for award by each unit or line item must include a price for each unit or line item for which the bidder wishes to be considered. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be construed in the favor of the City.
- (d) Alternate bids may be allowed at the sole discretion of the City.



3. DESCRIPTION OF SUPPLIES

Any catalog or manufacturer's reference used in describing an item is merely descriptive, and not restrictive, unless otherwise noted, and is used only to indicate type and quality of material. Each bid must clearly identify the proposed product, the quantity of the product, model, and type, as applicable. Prorata adjustments to packaging and pricing may be allowed at the sole discretion of the City.

4. ASSURANCE OF COMPLIANCE - EQUAL EMPLOYMENT OPPORTUNITY AND SMALL AND/OR MINORITY BUSINESS ADVOCACY REQUIREMENTS

It is the policy of the City of San Antonio that Small and/or Minority Business Enterprises shall have the maximum practicable opportunity to participate in the performance of public contracts. Bidder agrees that if this bid is accepted, he/she will not engage in employment practices which have the effect of discriminating against employees or prospective employees because of race, color, religion, national origin, sex, age, handicap or political belief or affiliation. In addition, bidder agrees, by submittal of this bid, that he/she will abide by all applicable terms and provisions of this Nondiscrimination Clause and the Small Business Advocacy Clause. These clauses are available in the City's Department of Economic and Employment Development and the City Clerk's Office.

5. SAMPLES, DEMONSTRATIONS AND TESTING

At the City's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested prior to award of the contract, upon delivery and/or at any point during the term of resulting contract. After notification, samples, demonstrations and/or testing must be provided within ten days. Failure to provide samples prior to award of contract will disqualify bidder from consideration. All samples (including return thereof), demonstrations and/or testing shall be at the expense of the bidder. Samples will be returned upon request; otherwise, samples will become property of the City of San Antonio, ten days after award of the contract.

6. SUBMISSION OF BIDS

- (a) Bids in triplicate shall be enclosed in sealed envelopes addressed to the City Clerk, City of San Antonio. The name and address of bidder, the date and hour of the bid opening, bid number and title of the bid solicitation shall be marked on the outside of the envelope(s).
- (b) Bids must be submitted on the forms furnished. Facsimile bids must be submitted in accordance with Par. 6 (a) above. Bids, however, may be modified provided such modifications are sealed and received by the City Clerk prior to the time and date set for the bid opening. However, the City of San Antonio shall not be responsible for lost or misdirected bids or modifications.
- (c) By submittal of this bid, bidder certifies to the best of his/her knowledge that all information is true and correct.

REJECTION OF BIDS

- (a) The City may reject a bid if:
 - 1. The bidder misstates or conceals any material fact in the bid; or
 - 2. The bid does not strictly conform to law or the requirements of the bid;
 - 3. The bid is conditional, except that the bidder may qualify the bid for acceptance by the City on an "All or None" basis or a "Low Item" basis. An "All or None" basis bid must include all items upon which bids are invited.
- (b) In the event that a bidder is or subsequently becomes delinquent in the payment of his, her or its City taxes, including state and local sales taxes, such fact shall constitute grounds for rejection of the bid, or if awarded the bid, for cancellation of the contract. However, the City reserves the right to deduct any delinquent taxes from payments that the City may owe to the delinquent bidder as a result of such contract.
- (c) The City may, however, reject all bids whenever it is deemed in the best interest of the City to do so, and may reject any part of a bid unless the bid has been qualified as provided in Par. 7 (a) 3 above. The City at its sole discretion may also waive any minor informalities or irregularities in any bid, to include failure to submit sufficient bid copies, failure to submit literature or similar attachments, or business affiliation information.

8. WITHDRAWAL OF BIDS

Bids may not be withdrawn after the time set for the bid opening, unless approved by the City Council.

9. LATE BIDS OR MODIFICATIONS

Bids and modifications received after the time set for the bid opening will not be considered.

10. CLARIFICATION TO BID SPECIFICATIONS

- (a) If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of the specifications, other bid documents, or any part thereof, he/she may submit to the City Director of Purchasing on or before seven calendar days prior to scheduled opening, a request for clarification. All such requests for information shall be made in writing and the person submitting the request will be responsible for its prompt delivery. Any interpretation of the bid, if made, will be made only by Addendum duly issued. A copy of such Addendum will be mailed or delivered to each person receiving bids. The City will not be responsible for any other explanation or interpretation of the proposed bid made or given prior to the award of the contract. Any objections to the specifications and requirements as set forth in this bid must be filed in writing with the Director of Purchasing on or before seven calendar days prior to the scheduled opening.
- (b) The City reserves the right to request clarification to assist in evaluating the bidder's response when the bid response is unclear with respect to product pricing, packaging or other factors. The information provided is not intended to change the bid response in any fashion and such information must be provided within **two** days from request.

11. DISCOUNTS

- (a) Prompt payment discounts will be considered in making the award provided the period of the discount offered is sufficient to permit payment within such period in the regular course of business (minimum ten days).
- (b) In connection with any discount offered, time will be computed from the date of receipt of supplies or services, or from the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.

12. AWARD OF CONTRACT

- (a) Per Section § 252.043 of the Texas Local Government Code, the contract will be awarded to either the lowest responsible bidder or to the bidder who provides goods and/or services at the best value for the City. In determining best value, the City may consider price, reputation, quality, past relationship with City, SBEDA requirements, long term cost and any other relevant factors.
- (b) The City reserves the right to accept any item or group of items on this bid, unless the bidder qualifies his/her bid by specific limitations. Re Par.7 (a) 3 above.
- (c) A written award of acceptance (manifested by a City Ordinance) and appropriation mailed or otherwise furnished to the successful bidder results in a binding contract without further action by either party.
- (d) The City of San Antonio reserves the right to utilize previous purchases as a basis for evaluation of bids when future usages are unable to be determined.
- (e) Breaking of tie bids shall be in accordance with the Texas Local Government Code § 271.901.
- (f) Although the information furnished to bidders specified the approximate quantities needed, based on the best available information where a contract is let on a unit price basis, payment shall be based on the actual quantities supplied. The City reserves the right to delete items, prior to the awarding of the contract, and purchase said items by other means; or after the awarding of the contract, to increase or decrease the quantities bid in accordance with § 252.048 of the Texas Local Government Code. No changes shall be made without written notification of the City.

13. CONTRACT TERMINATION

TERMINATION-BREACH:

(a) Should vendor fail to fulfill in a timely and proper manner, as determined solely by the Director of Purchasing & General Services, its obligations under this contract, or violate any of the terms of this contract, the City shall have the right to immediately terminate the contract. Notice of termination shall be provided in writing to the contractor, effective upon the date set forth in the notice. Such termination shall not relieve the vendor of any liability to the City for damages sustained by virtue of any breach by the vendor.

TERMINATION-NOTICE:

(b) Either party may cancel the contract at any time after award. The City shall be required to give the vendor notice **thirty** days prior to the date of cancellation of the contract. The vendor shall be required to give the City written notice **sixty** days prior to the date of cancellation of the contract.

TERMINATION-FUNDING:

(c) City retains the right to terminate this contract at the expiration of each of City's budget periods. This contract is conditioned on a best efforts attempt by City to obtain and appropriate funds for payment of any debt due by City herein.

14. DELIVERY OF GOODS/SERVICES

- (a) All materials are to be delivered F.O.B., City of San Antonio's designated facility.
- (b) Delivery dates pertaining to this invitation must be clearly stated in the bid form where required and include weekends and holidays. Failure to comply with this requirement may be a cause for disqualification of the bid. Unless otherwise specified, delivery at the earliest date is required. The bidder will clearly state in the bid the time required for delivery upon receipt of contract or purchase order. Proposed delivery time must be specific and such phrases "as required", "as soon as possible" or "prompt" may result in disqualification of the bid.
- (c) Upon award of a contract, the vendor is obligated to deliver the goods to the destination specified in the Invitation for Bids or the Purchase Order and bears the risk of loss until delivery. If this Invitation for Bids or Purchase Order does not contain delivery instructions, bidders shall request instructions in writing from the Director of Purchasing. If the delivery instructions contained in the Invitation for Bids allocate delivery costs and risks in a manner contrary to this section, the provisions of this Invitation for Bids shall prevail.
- (d) When delivery is not met as provided for in the contract, the Purchasing Department reserves the right to make the purchase on the open market, with any cost in excess of the contract price paid by the vendor, in addition to any other damages, direct or consequential, incurred by the City as a result thereof. In addition, failure of the vendor to meet the contract delivery dates will be cause for removal of the vendor from the City's list of eligible bidders as determined by the Purchasing & General Services Department.

15. PERFORMANCE DEPOSIT

- (a) The following provisions shall apply only when a performance deposit is specified as required in this Invitation for Bids.
 - (b) The successful vendor must furnish the City of San Antonio with a performance deposit in the amount set forth in the Invitation For Bids. This deposit is not to be submitted with the bid, but must be presented to the Purchasing & General Services Department within **ten** days from request.
- (c) The City of San Antonio will not enter into a contract or issue a purchase order until the successful vendor has complied with the performance deposit provisions.

- (d) The performance deposit shall be in the form of a performance bond (in a form acceptable to the City Attorney), cashier's check, certified check upon a state or national bank or trust company, or a check on such bank or trust company signed by a duly authorized officer thereof (checks to be drawn payable to the City of San Antonio), or a Certificate of Deposit from such bank or trust company assigned to the City of San Antonio, or an irrevocable letter of credit from a state or national bank or trust company.
- (e) The performance deposit of the successful vendor shall be returned by the City upon completion of the contract and final acceptance of all items in accordance with conditions thereof.
- (f) Failure of successful vendor to perform any of the services required by this contract within ten days of receipt of written demand for performance from City, or failure of vendor to correct or replace defective goods or products within ten days from receipt of written demand therefore, shall constitute a total breach of this contract and shall cause this contract to terminate immediately upon the expiration of the ten day period. In the event of such termination, the performance deposit shall be retained by the City of San Antonio as liquidated damages, based upon mutual agreement and understanding between vendor and City at the time this bid is solicited, submitted and accepted, that the City of San Antonio is a governmental agency engaged in public projects, and that the measurement of damages, which might result from a breach of the terms and specifications herein is difficult or impossible to determine. However, the Director of Purchasing & General Services with the concurrence of the City Manager, may return all or part of the performance deposit to the vendor if the Director determines, in the Director's sole discretion, that the failure to perform the conditions of this contract was the result of acts or events over which the vendor had no control. The determination shall then be final and binding on all parties.

16. INDEPENDENT CONTRACTOR

It is expressly understood and agreed by both parties hereto that the City is contracting with the successful vendor as an independent contractor. The parties hereto understand and agree that the City shall not be liable for any claims which may be asserted by any third party occurring in connection with the services to be performed by the successful vendor under this contract and that the successful vendor has no authority to bind the City.

17. BID RESULT REQUEST

Any party who wishes to be provided documents relating to the bid results shall make a request in writing. Pursuant to state law, the City may assess a fee in order to recoup the cost related to providing the requested information.

18. PATENTS/COPYRIGHTS

The successful vendor agrees to indemnify and hold the City harmless from any claim involving patent infringement or copyrights on goods supplied.

19. INDEMNITY

(a) CONTRACTOR covenants and agrees to FULLY INDEMNIFY and HOLD HARMLESS, the CITY and the elected officials, employees, officers, directors, and representatives of the CITY, individually or collectively, from and against any and all costs, claims, liens, damages losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal injury or death and property damage, made upon the CITY, directly or indirectly arising out of resulting from or related to CONTRACTOR'S activities under this CONTRACT, including any acts or omissions of CONTRACTOR, any agent, officer, director, representative, employee, consultant or subcontractor of CONTRACTOR, and their respective officers, agents, employees, directors and

representatives while in the exercise or performance of the rights or duties under this CONTRACT, all without, however, waiving any governmental immunity available to the CITY under Texas Law and without waiving any defenses of the parties under Texas Law. The provisions of this INDEMNIFICATION are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. CONTRACTOR shall promptly advise the CITY in writing of any claim or demand against the CITY or CONTRACTOR known to CONTRACTOR related to or arising out of CONTRACTOR'S activities under this CONTRACT and shall see to the investigation and defense of such claim or demand at CONTRACTOR'S cost. The CITY shall have the right, at its option and at its own expense, to participate in such defense without relieving CONTRACTOR of any of its obligations under this paragraph.

(b) It is the EXPRESS INTENT of the parties to this contract, that the INDEMNITY provided for in this section, is an INDEMNITY extended by CONTRACTOR to INDEMNIFY, PROTECT and HOLD HARMLESS the CITY from consequences of the CITY'S OWN NEGLIGENCE, provided however, that the INDEMNITY provided for in this section SHALL APPLY only when the NEGLIGENT ACT of the CITY is a CONTRIBUTORY CAUSE of the resultant injury, death, or damage, and shall have no application when the negligent act of the CITY is the sole cause of the resultant injury, death, or damage. CONTRACTOR further AGREES TO DEFEND, AT ITS OWN EXPENSE and ON BEHALF OF THE CITY AND IN THE NAME OF THE CITY, any claim or litigation brought against the CITY and its elected officials, employees, officers, directors and representatives, in connection with any such injury, death, or damage for which this INDEMNITY shall apply, as set forth above.

20. INSURANCE

If required, specific insurance provisions will be included in bid specifications. An original, certified copy of an insurance certificate must be submitted within **ten** days from request. The successful vendor will be required to maintain, at all times during performance of the contract, the insurance detailed in bid specifications. Failure to provide this document may result in disqualification of bid.

21. ACCEPTANCE BY CITY

The City shall have a reasonable time (but not less than 30 days) after receipt to inspect the goods and services tendered by vendor. The City at its option may reject all or any portion of such goods or services which do not, in City's sole discretion, comply in every respect with all terms and conditions of the contract. The City may elect to reject the entire goods and services tendered even if only a portion thereof is nonconforming. If the City elects to accept nonconforming goods and services, the City, in addition to its other remedies, shall be entitled to deduct a reasonable amount from the price thereof to compensate the City for the nonconformity. Any acceptance by the City, even if non-conditional, shall not be deemed a waiver or settlement of any defect in such goods and services.

22. WARRANTY

The supplies or services furnished under this contract shall be covered by the most favorable commercial warranties given to any customer for same or similar supplies or services.

23. CHANGE ORDERS

No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders will be made in writing by the City of San Antonio Purchasing & General Services Department.

24. ASSIGNMENT

The successful vendor shall not sell, assign, transfer or convey this contract in whole or in part, without the prior written consent of the City of San Antonio Purchasing & General Services Department. Any such assignment or transfer shall not release vendor from all contractual obligations.

25. INTERLOCAL PARTICIPATION

- (a) The City may, from time to time, enter into Interlocal Cooperation Purchasing Agreements with other governmental entities or governmental cooperatives (hereafter collectively referred to as "Entity" or "Entities") to enhance the City's purchasing power. At the City's sole discretion and option, City may inform other Entities that they may acquire items listed in this Invitation for Bids (hereafter "IFB"). Such acquisition(s) shall be at the prices stated herein, and shall be subject to bidder's acceptance. Entities desiring to acquire items listed in this IFB shall be listed on a rider attached hereto, if known at the time of issuance of the IFB. City may issue subsequent riders after contract award setting forth additional Entities desiring to utilize this bid. VENDOR shall sign and return any subsequently issued riders within ten calendar days of receipt.
- (b) In no event shall City be considered a dealer, remarketer, agent or other representative of Vendor or Entity. Further, City shall not be considered and is not an agent; partner or representative of the Entity making purchases hereunder, and shall not be obligated or liable for any such order.
- (c) Entity purchase orders shall be submitted to Vendor by the Entity.
- (d) Vendor authorizes City's use of Vendor's name, trademarks and Vendor provided materials in City's presentations and promotions regarding the availability of use of this contract. The City makes no representation or guarantee as to any minimum amount being purchased by City or Entities, or whether Entity will purchase utilizing City's contract.

CITY WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY OBLIGATIONS, INCLUDING, BUT NOT LIMITED TO, PAYMENT, AND FOR ANY ITEM ORDERED BY AN ENTITY OTHER THAN CITY.

26. QUESTIONS

Questions regarding interpretation of bids, bid results or bid awards should be directed to the Purchasing & General Services Department at (210) 207-7260 and referenced by bid number.

SPECIFICATIONS AND GENERAL REQUIREMENTS

<u>SCOPE</u>: The City of San Antonio is soliciting bids for an Airborne Thermal and Visible Light Imaging System in accordance with the specifications listed herein.

GENERAL CONDITIONS: The following general conditions will apply to all items within this bid unless specifically excluded within any item.

TEM	QUANTITY	DESCRIPTION
1	1 Each	Airborne Thermal and Visible Light Imaging Camera System

EQUIPMENT SPECIFICATIONS:

1. Dual sensor infrared/color camera gimbal with 4-axis stabilization

The L-3/SEO Model 12DS200 complies with this specification

2. System Interface Unit (SIU) with provisions for microwave downlink, SLASS searchlight slave unit, and GPS

The L-3/SEO Model 12DS200 complies with this specification

- 3. Picture in Picture, playback video inset within live picture
 - The L-3/SEO Model 12DS200 complies with this specification
- 4. Hand controller and cable

The L-3/SEO Model 12DS200 complies with this specification

- 5. Hand controller extension cable
 - The L-3/SEO Model 12DS200 complies with this specification
- 6. Ruggedized shipping/storage case
 - The L-3/SEO Model 12DS200 complies with this specification
- 7. Support of the system for a period not less than 10 years from purchase date
 - The L-3/SEO Model 12DS200 complies with this specification
- 8. Vendor must deliver equipment to American Eurocopter Located at 2701 Forum Drive Grand Prairie, Texas 75052-7099.
 - L-3/SEO will comply with this requirement, and also drop-ship installation cables and SIU tray immediately upon receipt of order.
- 9. Vendor must provide 1 site visit by a factory representative per year for the next two years, which must include: travel and living expenses, technical support, and refresher training.
 - The L-3/SEO Model 12DS200 complies with this specification
- 10. Vendor must provide at least a 2 year warranty which includes:
 - The L-3/SEO Model 12DS200 complies with this list of specifications.
 - a) 1000 hours of operation per year for year one and two
 - b) >4 hour telephone response for on-site technical support
 - c) <72 hour response for on-site technical support
 - d) All repair parts and labor

- e) Access to a spare unit when the City of San Antonio Police Department Helicopter Detail is without their repairable system for any duration greater than 7 calendar days due to a warranty claim
- f) Repair and turn around time Maximum 30 business days, exclusive of shipping/customs
- g) All transportation charges for any warranty claims to and from, exclusive of duties and taxes
- 12. The City of San Antonio Police Department will ensure all systems are located in one location.
- 13. The City of San Antonio Police Department will be responsible for aircraft installation.

GIMBAL HOUSING SPECIFICATIONS:

1. Airborne Camera System:

A. Camera Housing (Gimbal):

1. Stabilization: The Helicopter Detail requires the vendor to provide a gimbal which stabilizes its payload to at least 35 microradians rms or better. No lesser stabilization will be acceptable due to the advanced real optical magnification required in this specification.

The L-3/SEO Model 12DS200 complies with this specification

2. Vibration Isolation: Due to the fact the optics bench of this camera system will require at least 35 microradians rms or better stability, it is also desired the gimbal housing be isolated for vibration in six axis passive isolation, which is x/y/z/pitch/roll/yaw.

The L-3/SEO Model 12DS200 complies with this specification

3. Slew Rate: Maximum slew rate shall be greater than 60° per second.

The L-3/SEO Model 12DS200 complies with this specification

4. Azimuth Range: Gimbal azimuth range shall be a continuous 360°.

The L-3/SEO Model 12DS200 complies with this specification

5. Elevation Range: Gimbal elevation range shall be +75° to -90°.

The L-3/SEO Model 12DS200 complies with this specification

6. Environmental: The gimbal housing shall be sealed without the use of air hoses or pumps against moisture, salt water, spray, and rain.

The L-3/SEO Model 12DS200 complies with this specification

7. Weight: The weight of the gimbal housing shall not be more than 50 pounds.

The L-3/SEO Model 12DS200 complies with this specification

8. External Vibration Isolation: The gimbal housing shall not require external vibration isolation in order to obtain the required specifications for stabilization.

The L-3/SEO Model 12DS200 complies with this specification

9. Mounting: The gimbal shall be mounted using the standard Dovetail mounting bracket commonly used in airborne camera systems.

The L-3/SEO Model 12DS200 complies with this specification

10. Handling: The gimbal shall have provisions for movement from aircraft to aircraft with either handles, or similar type of positive grip mechanism.

The L-3/SEO Model 12DS200 complies with this specification

11. Steering: The gimbal shall be steered via a hand controller unit. Laptop controllers will not be acceptable.

The L-3/SEO Model 12DS200 complies with this specification

a) Gyro Null: If the gyros require nulling out, the nullification shall be conducted by the operator, without having to send the system back to the factory.

The L-3/SEO Model 12DS200 complies with this specification

b) Pan/Tilt Adjustment: In order to decrease the workload of the operator, a "dial in induced drift" shall be adjustable by the operator via the Hand Controller Unit.

The L-3/SEO Model 12DS200 complies with this specification

B. Infrared Imager:

1. Infrared Control Features: Infrared imager must have the following features that will be switch able on the hand control unit:

The L-3/SEO Model 12DS200 complies with this list of specifications

- a) Level: This adjustment changes the level or brightness of the infrared imager as whole.
- b) Gain: This adjustment changes the video gain, or contrast of the infrared image.
- c) Auto Gain: Infrared camera must have an auto gain feature which can be turned on/off via the hand control unit, and not a menu driven item.
- 2. Infrared Detector: Must be a focal plane array with an InSb 256 x 256 detector or better. It must be responsive to infrared energy in the 3-5 micron range of the infrared spectrum.

The L-3/SEO Model 12DS200 complies with this list of specifications

- a) Integration Adjustment: The infrared detector shall have an adjustment to change the integration time of the detector in order to obtain the detector's best possible image. Integration times shall be labeled as Normal, Cold, and Hot, signifying the different dwell times of the detector on the scene in order to create an image.
- b) Infrared Cooling: Shall be a closed cycle cooling assembly capable of cooling the detector element in less than 6 minutes.
- c) Non-Uniformity Calibration (NUC): A non-uniformity calibration shall be user selectable via a menu driven icon. This is crucial for focal plane arrays, and proper calibration ensures clean and crisp infrared video. Having to send the system back to the factory for a simple NUC is unacceptable.

3. Infrared Optics:

The L-3/SEO Model 12DS200 complies with this list of specifications

- a) Wide Field of View: Must be real optical magnification, and be at least 25° @ 17 mm
- b) Narrow Field of View: Must be real optical magnification, not electronic zoom, and the lens assembly must travel the full focal length of the lens' stated magnification, and must be at 2.2° or narrower (lower number) @ 200mm.
- c) Field of View Switching Time: Due to operational safety and quickness, field of view change time must be <0.125 seconds or better (faster).

C. Visible Light Camera System:

1. Visible Light Detector:

The L-3/SEO Model 12DS200 complies with this list of specifications

a) Detector Type: 1/3" 1CCD

b) Video Format: NTSC

c) Resolution: 470 TV Lines

d) Minimum Illumination: 0.2 lux @ f1.6

e) Real Optical Magnification: Visible light camera must utilize real optical magnification, and the lens specified MUST travel the full focal length of the lens' stated magnification. The visible light imager must NOT utilize any type of electronic zoom. The lens assembly required to meet this specification is the following:

Wide Field of View: 22.2° @ 11.2mm Narrow Field of View: 1.1° @ 224mm

Continuous Zoom Lens: Lens assembly must move continuous from 224mm to 11.2mm, thus

providing 20x real optical magnification.

D. <u>System Interface Unit</u>: The requirement for this procurement shall be for (1) System Interface Unit equipped with Picture-in-Picture, and (2) Installation Trays. The following specifications describe what each System Interface Unit shall contain and be able to operate.

The L-3/SEO Model 12DS200 complies with this list of specifications

1. Weight: Not to exceed 15lbs.

- 2. Power: 28VDC @ 15A, and 20A with optional accessories
- 3. Video Inputs: Must have at least (4) NTSC composite video inputs
- 4. Video Outputs: Must have at least (4) NTSC composite video outputs.
- 5. Data Interfaces: Must have RS 232, RS 422, ARINC 407, ARINC 419/429, and MIL-STD 1553 data interfaces to work with moving map systems, microwave down-linking systems, and searchlight slaving systems.
- 6. Power Outputs: Must have (2) Switched 28VDC (unregulated) and (2) switched (regulated) in order to allow for popular optional upgrades and extra monitors and recorders.
- 7. Internal GPS: System must be capable of embedding a GPS which will display the LAT/LON position of the aircraft. (This is an optional item, and a mandatory specification)
- 8. Audio Switcher: The system will have an optional audio switcher which will have (8) balanced audio inputs, and (8) balanced audio outputs for future microwave down-linking systems.
- 9. Picture-in-Picture: The system will have, without the use of extra boxes, a picture-in-picture chip.
- 10. Microwave Down-link Control: Without the addition of a control box, the System Interface Unit shall be capable of controlling a microwave down-link antenna and transmitter. Through the hand controller unit, the operator will be able to change frequencies, video sources, antenna power, and transmit receive site selection.
- 11. Searchlight Slaving: The System Interface Unit must be able to be slaved to a Spectrolab SX-5 without
 - the use of external boxes to allow the gimbal to be slaved for night operations.
- 12. Compass System Interface: The System Interface Unit shall be capable of interfacing with an ARINC Compass System such as the KING KCS-305 for future microwave down-linking operations.
- E. <u>Hand Controller Unit</u>: The Hand Controller Unit (HCU) shall be lightweight, ergonomically designed and backlit for nighttime visibility. The requirement for this procurement is to supply the City (1) Hand Controller Unit with the following specifications:

The L-3/SEO Model 12DS200 complies with this list of specifications

1. Control the Visible Light Sensor: All controls for the visible light sensor such as IRIS, Auto Iris, Gain, zoom, and control of the speed of zoom shall be controlled by the HCU.

- 2. Control of the Infrared Imaging Sensor: All controls for the infrared imaging sensor shall be adjusted using toggles or knobs on the HCU. All functions such as Level, Gain, Auto Gain, Polarity, and Focus shall all be on the HCU.
- 3. Control of Optional Microwave Down-link: If desired in the future, the HCU shall be capable of controlling a microwave down-linking system. This is described as the ability to adjust via the HCU functions, the transmitter, antenna choice, waypoint or receive point, and frequency of the transmitter itself.
- 4. Searchlight Slaving: The HCU shall be upgrade able of allowing affixing of a slaving control unit to the HCU body to act as one HCU for both the searchlight and the airborne camera system specified in this document.
- **F.** <u>Laser Illuminator Upgrade</u>: The gimbal assembly shall be upgradeable to accept a laser illuminator with the following specifications:

The L-3/SEO Model 12DS200 complies with this list of specifications

- 1. Laser Type: Diode
- 2. Wavelength: 860nm
- 3. Modes: Continuous or Pulsed (user selectable)
- 4. Range (Typical): 10km
- 5. Power Output: 1w

G. Cabling System:

The cabling system will use MIL-SPEC connector types, be built of aircraft grade materials.

The L-3/SEO Model 12DS200 complies with this specification

Notes:

- 1. Contact Persons: For technical questions, please contact Sgt. Patrick McNamara at (210) 922-0408. For additional information, please contact Debra Reyes, Buyer at (210) 207-7266.
- 2. All prices to be quoted F.O.B. City of San Antonio Facility, freight prepaid.
- 3. L-3/Wescam Model 12DS200 or approved equal.

PRICE SCHEDULE

ITEM QUANTITY DESCRIPTION 1 1 Each Airborne Thermal and Visible Light Imaging Camera System

PRICE TOTAL **\$207,800.00 USD**

(DOES NOT INCLUDE EXTRA TRAINING OPTION, STANDARD TRAINING WILL BE PROVIDED AS PREVIOUSLY EXECUTED BY TODD NEWTON)

MFR. & NO.: L-3 COMMUNICATIONS SONOMA E-O & MODEL 12DS200 W/PIP W/2 YR WTY

DELIVERY WILL BE MADE WITHIN <u>90</u> CALENDAR DAYS. (NOTE: L-3 WILL SHIP INSTALLATION CABLES AND SIU 800 TRAY IMMEDIATELY UPON RECEIPT OF PURCHASE ORDER TO AMERICAN EUROCOPTER)

IMPORTANT MAILING INSTRUCTIONS:

MAIL TO:

CITY CLERK

P.O. BOX 839966

SAN ANTONIO, TX 78283-3966

PHYSICAL ADDRESS:

CITY CLERK

CITY HALL (COMMERCE ST. & FLORES ST.)

100 MILITARY PLAZA, 2ND FLOOR

SAN ANTONIO, TEXAS 78205

MARK ENVELOPE:

"BID TO FURNISH AIRBORNE THERMAL AND

VISIBLE LIGHT IMAGING CAMERA SYSTEM"

BIDS TO BE OPENED: 2:00 P.M., November 6, 2006

BID NO.: 07-003 DG

REMARKS: